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ABSTRACT

In spring 1983, a follow-up study was conducted of students who received a certificate or associate degree (AA) from Harford Community College (HCC) during the 1981-82 academic year. Surveys were mailed to 491 graduates requesting information on their goals and goal achievement, transfer and employment experiences, and satisfaction with HCC. A total of 244 graduates responded to the survey, and an additional 209 graduates were surveyed by phone. In addition, 48 of 61 employers completed questionnaires concerning the training and job performance of their graduate employees. Survey responses revealed: (1) 68% of the graduates were female, 62% under 30 years of age, and 92% white; (2) 62% had enrolled in a career program and 81% had earned an associate degree; (3) 80% of the graduates reported having achieved their goal in attending HCC; (4) 86% of those who wished to transfer achieved their goal, as did 75% of those who attended HCC for career development; (5) graduates who transferred lost few credits and earned respectable grades at their transfer institutions; (6) employers of HCC graduates rated them as competent or highly competent, and 99% indicated they would hire another HCC graduate; and (7) 95% of the graduates were satisfied with HCC as a whole, the instruction they received, and their preparation for transfer and/or career development. The survey instruments are appended. (LAL)

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ONE YEAR LATER
A FOLLOW-UP OF THE HARFORD COMMUNITY COLLEGE 1982 GRADUATES

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TABLE OF CONTENTS

	Page
List of Tables and Figures	i
Abstract	iii
INTRODUCTION	
Purpose	1
Limitations	1
METHOD	
Procedure	2
Response Bias	2
RESULTS	
Characteristics and Status	4
What were the characteristics of the graduates?	4
What enrollment patterns were experienced by the graduates?	5
What was the status of the graduates immediately before attending the College?	8
What was the status of the graduates a year after graduation?	9
Educational Goals	11
What were the primary reasons for attending the community college?	11
What proportion of the graduates achieved their goal?	13
Why did graduates choose to come to HCC?	17
Transfer	18
What proportion of the graduates transferred and what proportion transferred who had transfer as their primary goal? What was the enrollment status of the transfers?	18
To what colleges did the graduates transfer?	19
How efficient was the transfer process for the graduates?	21
How successful are Harford's students at their transfer institution?	22
What rating did Harford's graduates give their preparation for transfer?	23
Career	24
What is the current employment status of the graduates?	24
Was the graduate's job (full-time only) related to his current position?	25
In what location were Harford's graduates (full-time only) employed?	25
How satisfied were the graduates with their preparation they received at the community college?	27
Were the unemployed graduates seeking work? Of these, why were they unable to get a job?	28
What were the salaries earned by graduates?	29

Page

Special Populations..... 30
The "Traditional" Student..... 30
What was the experience of the "traditional" college graduate?.... 30
The "Returning Woman"..... 30
What was the experience of the "returning woman" college graduate?..... 30

Employer Evaluation of Graduate's Preparation for Work..... 31
How many full-time career graduates working in jobs related to their college program gave permission to contact their employer?..... 32
How did the employers rate the college preparation of the graduate as adequate in the following areas: (1) performance of job skills, (2) familiarity with test and laboratory equipment required by the job, (3) ability to learn new techniques on the job, (4) ability to communicate with superiors, and (5) ability to work well with other workers?..... 33
How do the employers rate the vocational training as it relates to the graduate's job in the areas of technical knowledge, work attitude, and work quality?..... 34
How do community college graduates compare to other employers? Would you employ another graduate?..... 34
How often is a community college degree required or preferred in hiring for the position?..... 35

Graduate's Overall Evaluation..... 36
How satisfied were the graduates with the quality of classroom instruction in their community college program and how satisfied were they with the overall quality of the college?..... 36

SUMMARY AND RECOMMENDATIONS

Characteristics and Current Status..... 37
Educational Goals..... 38
Goal Achievement..... 38
Transfer Function..... 39
Career Development..... 40
Special Populations..... 41
Employer Evaluation..... 41
Student Satisfaction..... 42

APPENDICES

Appendix A--Maryland Public Community Colleges Graduate Follow-Up Questionnaire..... 43
Appendix B--1982 Graduate Follow-Up Study Nonrespondent Phone Interview..... 47
Appendix C--Maryland Community Colleges Employer Questionnaire..... 48

TABLES AND FIGURES

Page

Table 1--Comparison of Respondent (Mail) and Nonrespondent (Telephone) Results..... 3

Table 2--Characteristics of Respondents..... 4

Table 3--Type of Degree by Attendance Status..... 5

Table 4--Years at College by Associate in Arts Graduates for Part-Time and Full-Time Students..... 6

Table 5--Years at College by Certificate Graduates for Part-Time and Full-Time Students..... 7

Table 6--Status Before Attending Community College..... 8

Table 7--Status of Students One Year After Graduation..... 9

Table 8--Primary Reason for Attending Community College..... 11

Table 9--Goals of Graduates by Type of Program..... 13

Table 10--Was Personal Goal Achieved?..... 13

Table 11--Goal Achievement by Personal Goal..... 15

Table 12--Goal Achievement by Academic Program..... 16

Table 13--Reason for Chosing This College..... 17

Table 14--Respondents Who Transferred..... 18

Table 15--Locations of Harford's Graduate Transfers..... 19

Table 16--Credit Hours Lost in Transfer..... 21

Table 17--Relationship of Curriculum Program to Transfer Program..... 22

Table 18--Transfer Grade Point Average..... 22

Table 19--Satisfaction with Preparation for Transfer..... 23

Table 20--Current Employment Characteristics..... 24

Table 21--Relationship of Program to Job..... 25

Table 22--Employment Location of Graduates..... 25

Page

Table 23--Satisfaction with Job Preparation..... 27

Table 24--Satus of Unemployed Graduates..... 28

Table 25--Average Salary of Graduates..... 29

Table 26--Gave Permission to Contact Employer..... 32

Table 27--Ratings of Adequacy of Graduates by Employers..... 33

Table 28--Ratings of the Vocational Training Received by Graduates..... 34

Table 29--Comparison of Graduates' Work with Others..... 34

Table 30--Is a Two-Year AA Degree Required?..... 35

Table 31--Satisfaction with Instruction in Program and Satisfaction with Quality of College..... 36

Figure 1--Current Status of Graduates..... 10

Figure 2--Reason for Attending College..... 12

Figure 3--Personal Goal Achievement..... 14

Figure 4--Achievement by Personal Goal..... 15

Figure 5--Where Harford Graduates Transfer..... 20

Figure 6--Employment Location of Graduates..... 26

ABSTRACT

Harford Community College conducts extensive follow-up studies to evaluate the extent to which the College assists students in achieving their educational goals, their career development, and their preparation for transfer. This study analyzes the responses given by graduates in the class of '82 one year after they completed their degree requirements. The study also includes the perceptions of employers who hired HCC's graduates from the class of '82.

With few exceptions, the results indicate that the College was quite successful in assisting students reach their educational goals and that both students and employers of graduates were very satisfied or satisfied with the College's programs and staff. However, the study did suggest several possible avenues for improvement.

The major research findings showed that:

(a) Eighty percent of the graduates reported having achieved their goal;

(b) Eighty-six percent of those whose primary reason for attending the College was preparation for transfer (one-third of all students) had achieved their goal;

(c) Seventy-five percent of those expressing career development as a goal (one-third of all students) were successful;

(d) Graduates who had transferred lost very few credits when transferring and earned respectable grades at their transfer institution;

(e) The employers of HCC graduates rated these former students as highly competent or competent. Ninety-nine percent would hire another HCC graduate.

(f) Ninety-five percent of the graduates were satisfied with the College as a whole, the instruction they received, and their preparation for transfer and/or career development.

ONE YEAR LATER
A FOLLOW-UP OF THE HARFORD COMMUNITY COLLEGE 1982 GRADUATES

INTRODUCTION

Purpose

Harford Community College is a multifaceted institution which provides appropriate post-secondary educational experiences in learning primarily to the residents of Harford County. The student population at the College reflects a wide range of ages, interests, educational backgrounds, and personal academic and career goals.

It is the purpose of the College's follow-up studies to evaluate the extent to which the College was successful in meeting these diverse needs. More specifically, the follow-up studies measure the extent to which the College was successful in attaining three major goals which are:

1. To assist students in achieving their individual educational goals,

2. To assist students in preparation for transfer to a four-year college or university,

3. To assist students in career development.

This study concerns only those students who graduate with an Associate Degree or a certificate. An earlier study ("1978 Entrant Follow-Up Study") focused on all first-time students regardless of their subsequent graduate status. About one-third of the College's credit students never intend to take a course of study leading to a degree or a certificate.

The report will analyze the results of Harford's 1982 Graduate Follow-Up and will compare these results with the totals for Maryland community colleges of similar size (peer colleges) and with the figures from earlier Harford studies. (The Peer College group consists of the following community colleges: Alleghany, Chesapeake, Dundalk, Frederick, Hagerstown, Harford, and Howard.) Further, results for various subpopulations (by program, sex, age, etc.) will be noted when they depart markedly from the total. Breakdowns of other subpopulations are available from the Office of Institutional Research upon request.

Limitations

The study examines the students' perception of how well the College performs its primary academic functions. While goal achievement, transfer, and employment are central outcomes, they are by no means the only effects of college. Other educational outcomes such as an aesthetic appreciation and cultural awareness were not directly investigated. (See Harford Community College's Self-Study, Pages 3-5.) Also, the study focused solely on the credit graduate student. A similar study, "Continuing Education Survey, Fall 1981," sheds light on the non-credit side of the College; and another study, "1978

Entrant Follow-Up Study," focuses on all first-time credit students regardless of graduation status.

METHOD

Procedure

The study population numbered 491 students who received a certificate or an associate in arts degree during the 1981-1982 academic year. In the spring of 1983, approximately one year after graduation, these students received a questionnaire by mail designed by the Maryland Community College Research Group which covered four basic areas: goals and goal achievement, transfer, employment, and student satisfaction (see Appendix A).

Also, a shorter survey was conducted by telephone for those graduates who did not respond to the mailed survey (see Appendix B). This study was conducted by Gene Popiolek, a member of the counseling faculty, with support from a Division of Vocational-Technical Education grant.

From the initial 491 mailed surveys, 28 were undeliverable, leaving a field of 463. Of that field, 244 graduates responded which equals 53 percent of the total. The nonrespondent telephone survey was successful in contacting an additional 209 graduates. The data from questions asked in both surveys were added into the original data base. For these questions, the response rate ran as high as 98 percent.

In addition, a third survey was sent to the employers of Harford Community College career graduates who were working full-time in jobs that were related to their academic program. Employers were contacted only if the graduate gave prior permission. Seventy-nine percent of the employers (48 out of 61) returned completed questionnaires.

Response Bias

Although a return rate of 53 percent for a population of 491 is considered to be a good sample, the question of whether the nonrespondent group may be biasing the results still remains.

In this regard, the research literature holds that (1) nonrespondent bias is unlikely when the population surveyed has a common identity (e.g., parents from one school, graduates from a college) and (2) the most likely exception to the above is the case where the survey concerns highly personal or sensitive areas.

Although the Graduate study did survey a common population and for the most part did not ask sensitive questions, the question of nonrespondent bias was measured more directly by a telephone follow-up study which asked a subset of questions from the longer mailed survey.

Bias from nonrespondents is detected in two basic ways. First, the demographic characteristics of the respondents and nonrespondents are compared. Secondly, the responses to questions answered by both groups are compared.

The results may be biased wherever the group totals are statistically different. For data of the type used in this study, statistical difference is determined by a chi square calculation. A chi square value of .10 or less was considered significant. This means that a difference found between the response patterns for the mail respondents and the telephone respondents had only a 10 in 100 probability of occurring by chance alone.

In general, the two groups were found to be quite similar. Only four of the sixteen items compared were found to be significantly different. Differences were found in the items "program type," "highest degree earned," "cumulative grade point average," and "employment status." To a greater extent than the non-respondents, the mail respondents tended to be enrolled in transfer programs, to have earned an AA degree, to have a higher grade point average, and to have part-time rather than full-time jobs. The telephone respondents achieved their primary educational goal and reported satisfaction with the College to the same extent as the mail respondents.

In conclusion, therefore, the original sample of respondents was representative of the population of graduates and conclusions drawn from the sample are valid for all graduates.

TABLE 1
GRADUATE FOLLOW-UP 1982
COMPARISON OF RESPONDENT (MAIL) AND NON-RESPONDENT (TELEPHONE) RESULTS

Question or Item	Chi Square Value	Significance Greater Than .10
Program Type (Transfer or Career)	.08	yes
Highest Degree Earned	.06	yes
Cumulative Grade Point Average	.02	yes
Employment Status	.09	yes
Credits Earned at Community College	.44	no
Still Enrolled at HCC?	.95	no
Sex	.12	no
Age	.90	no
Race	.90	no
Primary Reason for Attending	.17	no
Goal Achievement	.60	no
Satisfaction with College	.25	no
When Present Job Began	.14	no
Relation of Program to Job	.26	no
Seeking a Job?	.38	no
Attend Another College?	.20	no

Characteristics and Status

What were the characteristics of the graduates?

Among the characteristics examined, two-thirds of the graduates were females, or under 29 years of age, or enrolled in a career program. Eighty percent had earned an AA degree and one-third held cumulative GPA's of 3.50 or better. Over 90 percent were white. Sixteen percent were still enrolled at Harford. Harford's results were similar to the Peer College's figures. (See Table-2 for more detail.)

TABLE 2
GRADUATE FOLLOW-UP 1982
CHARACTERISTICS OF RESPONDENTS

Characteristic	College		Peer Colleges	
	Number	Percent	Number	Percent
Program Type at Exit				
Transfer	93	38%	453	36%
Career	152	62%	793	64%
Highest Degree Earned				
AA	197	81%	944	76%
Certificate	47	19%	301	24%
Cumulative GPA				
2.49 and under	28	12%	153	12%
2.50 - 3.49	141	58%	730	59%
3.50 and above	75	31%	360	29%
Mean	3.18		3.15	
Still Enrolled at Same College	39	16%	166	16%
Sex				
Male	79	32%	411	33%
Female	165	68%	834	67%
Age				
29 or under	149	62%	822	70%
30 or over	95	38%	424	30%
Mean	29		28	
Race				
Minority	18	8%	93	6%
Non-minority	225	92%	1153	94%

What enrollment patterns were experienced by the graduates?

As detailed in Table 3, 81 percent of the graduates received AA degrees and 19 percent earned certificates. Just under one-half of these students (46 percent) attended the College part-time and just over one-half (54 percent) of the graduates matriculated on a full-time basis. Transfer students tend to enroll on a full-time basis to a greater extent than do career graduates. When compared to the Peer Colleges group, Harford tends to be more part-time.

A breakdown of degrees conferred by attendance status clearly indicates that full-time students are much more likely to earn AA degrees than part-timers. Among the part-time student group, 66 percent earned an associate in arts degree and 34 percent were awarded certificates. On the other hand, 94 percent of the full-time students earned AA's and only 6 percent earned certificates.

TABLE 3
1982 GRADUATE FOLLOW-UP STUDY
TYPE OF DEGREE BY ATTENDANCE STATUS

	Associate		Certificate		Total	
	Number	Percent	Number	Percent	Number	Percent
Part-time	(71)	66%	(37)	34%	(108)	46%
Full-time	(121)	95%	(6)	5%	(127)	54%
Total	(192)	81%	(43)	19%	(237)	100%

A further analysis of enrollment patterns concerns the time period between initial enrollment and graduation, broken down by attendance status and type of degree earned. In other words, typically, how long does it take for a full-time student to earn an AA? A part-time student student to earn a certificate, etc.? In this section the length of attendance in some cases may seem too long. This is because students often defer their education for a number of years.

Full-time students earning an AA degree outnumber part-timers by 2:1. Most full-time students graduate after two (44 percent) or three (33 percent) years at the College. However, many take longer--one took 18 years. The average of this group was 3.2 years, and the median was 2.6 years. Almost eighty percent graduate within three years.

Obviously, part-time students typically take longer to earn an AA degree. Most part-timers take four (20 percent) or five (20 percent) years to graduate. The group average and median is somewhat higher at 5.3 years and 4.7 years respectively. One student took 15 years. Almost 80 percent graduate by the sixth year.

TABLE 4
GRADUATE FOLLOW-UP 1982
YEARS AT COLLEGE BY ASSOCIATE IN ARTS GRADUATES FOR PART-TIME AND FULL-TIME STUDENTS*

	Part-Time		Full-Time	
Years	Number	Percent	Number	Percent
One year	1	2%	3	3%
Two years	6	9%	53	44%
Three years	10	15%	39	33%
Four years	13	20%	13	11%
Five years	13	20%	4	3%
Six years	7	11%	1	1%
Seven years	5	8%	2	2%
Eight years	4	6%	1	1%
Nine years	2	3%	1	1%
Ten or more	5	8%	4	3%
Total	66		120	
Mean:	5.3		Mean:	3.2
Mode:	4.0		Mode:	2
Median:	4.7		Median:	2.6
Maximum:	15		Maximum:	18
Missing Cases:	5		Missing Cases:	1

*Time spent earning credits at other institutions is not included.

Part-time students seeking a certificate outnumber full-time students by 4:1. Only 8 of the 43 students receiving certificates in the sample were attending full-time. Over two-thirds of these full-time students received a certificate within a year or less.

Over one-third of the certificate graduates attending part-time took two years to graduate. About 15 percent took one year and approximately 15 percent took four years to finish. The mean and median are 3.5 years and 2.5 years respectively. One individual graduated 14 years after he started.

TABLE 5
GRADUATE FOLLOW-UP 1982
YEARS AT COLLEGE BY CERTIFICATE GRADUATES FOR PART-TIME AND FULL-TIME STUDENTS*

	Part-Time		Full-Time	
Years	Number	Percent	Number	Percent
Less than 1	0	0	2	25%
1	5	14%	4	50%
2	13	37%	0	--
3	5	14%	1	13%
4	4	11%	0	--
5	2	6%	0	--
6	2	6%	0	--
7 or more	4	11%	1	13%
Total	35		8	

Mean:	3.5	Mean:	2
Mode:	2	Mode:	1
Median:	2.5	Median:	1
Maximum:	14	Maximum:	7
Missing Cases:	2	Missing Cases:	0

*Time spent earning credits at other institutions is not included.

What was the status of the graduates immediately before attending the College?

The graduates were given three job related items and an "other" response to choose from when asked about their status immediately before attending the College. About two-thirds marked the "other" item and one-third checked one of the job related responses. Of these, almost all chose "dead-end job" (28 percent overall). Two percent and one percent respectively chose "job eliminated" and "laid off" as their response. These last two items, given recent economic trends, will in all likelihood increase.

TABLE 6
GRADUATE FOLLOW-UP 1982
STATUS BEFORE ATTENDING COMMUNITY COLLEGE

	1982		1982
	Percent	Number	Peer Colleges
Dead-end job	28%	(59)	19%
Job eliminated	2%	(5)	2%
Laid off	1%	(3)	2%
Other	68%	(142)	77%
Total		(209)	

What was the status of the graduates a year after graduation?

Table 7 and Figure 1 summarize the status of the graduates a year after graduation.

Over two-thirds of the graduates were employed. About half were employed and not attending school, and of these 77 percent were working full-time. About one-fifth of the graduates were employed and had transferred--60 percent of these were working full-time. Sixteen percent transferred and were not working. In all 38 percent had transferred.

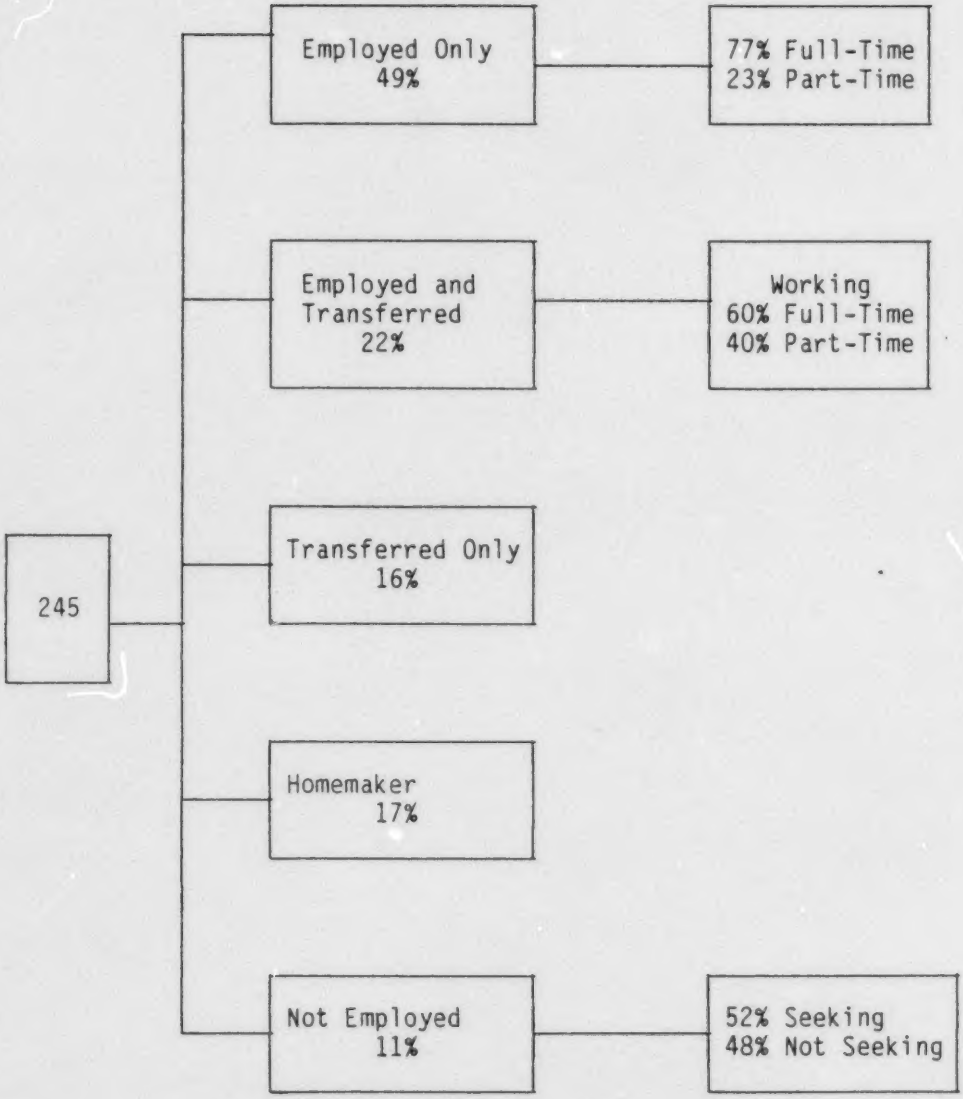
Eleven percent of the graduates were not employed and of these 52 percent were seeking work. Seventeen percent were engaged as homemakers.

These results are quite similar to the Peer Colleges' proportions. The results also paralleled earlier Harford studies with the exception of the "in school" item where a 10 percent decline is indicated.

TABLE 7
GRADUATE FOLLOW-UP 1982
STATUS OF STUDENTS ONE YEAR AFTER GRADUATION

	1978	1980	1982 Percent	1982 Number	1982 Peer Colleges
In school	45%	48%	38%	(93)	40%
Employed	70%	69%	72%	(176)	71%
Not Employed	11%	0%	11%	(27)	13%
Homemaker	12%	13%	17%	(41)	12%
Active Military	1%	2%	0%	(1)	1%
Other	2%	4%	3%	(8)	4%
Total				(346)	

FIGURE 1
GRADUATE FOLLOW-UP 1982
CURRENT STATUS OF GRADUATES



Educational Goals

What were the primary reasons for attending the community college?

Reflective of a national trend, the percentage of students attending community colleges who intend to transfer is on the decline. In 1982, 30 percent of Harford's respondents reported "transfer to a four-year institution" as their primary educational goal. This figure is somewhat lower than the Peer Colleges and is down markedly from the 37 percent reading for Harford's 1978 and 1980 Graduate Follow-Ups. (If the telephone respondents are added to the mail sample, the transfer percentage drops to 26 percent.)

On the other hand, the proportion choosing career development as an educational goal has remained steady. In 1982, 39 percent of the graduates had career goals with 32 percent seeking to prepare for immediate entry into a career and 7 percent attempting to update skills for a job currently held. These results also approximate the figures for the Peer Colleges.

A surprise in the results concerns the next item, "exploration of new career or academic areas." The percentage of graduates indicating this choice has increased from a low of 10 percent in 1978 to a high of 19 percent in 1982. The Peer Colleges figure is similarly high.

Finally, one-tenth of Harford's graduates attend primarily for their own interest and self-enrichment. This figure has remained stable over the last three follow-ups.

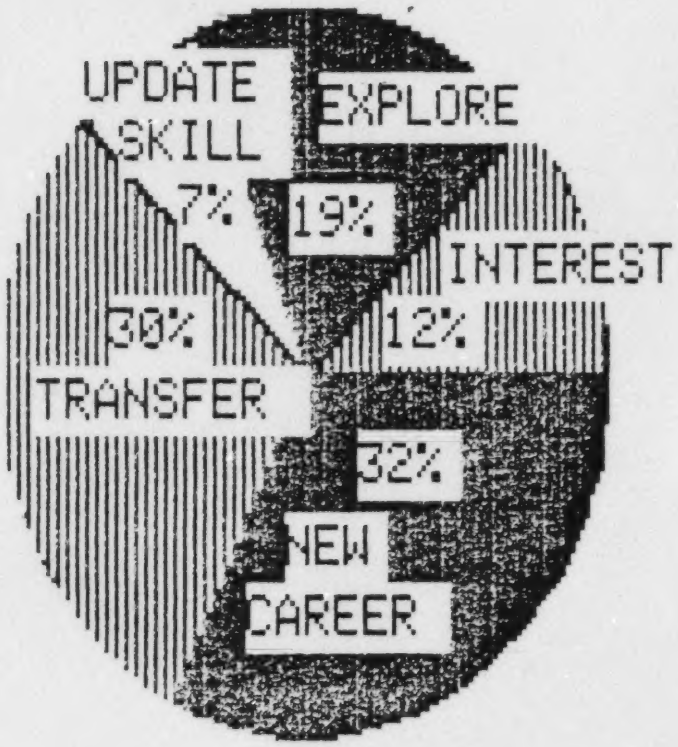
TABLE 8
GRADUATE FOLLOW-UP 1982
PRIMARY REASON FOR ATTENDING COMMUNITY COLLEGE

	1978	1980	1982 Percent	1982 Number	1982 Peer Colleges
Exploration	10%	13%	19%	(43)	17%
New Career	29%	27%	32%	(73)	34%
Transfer	37%	37%	30%	(69)	32%
Update Skills	9%	8%	7%	(15)	6%
Interest	10%	12%	10%	(23)	9%
Other	4%	3%	2%	(5)	3%
Total				(228)	

FIGURE 2

GRADUATE FOLLOW-UP 1982

REASON FOR ATTENDING COLLEGE



An examination of goals by type of program sheds more light on this question. Apparently, Harford's graduates--as is true on a national community college scale--often use academic programs for purposes other than what they were originally designed to accomplish. For example, 14 percent of the occupational students reported that transfer was their educational goal and 12 percent of transfer students held career goals. One-third of the data processing and the criminal justice graduates held transfer goals.

TABLE 9
GRADUATE FOLLOW-UP 1982
GOALS OF GRADUATES BY TYPE OF PROGRAM

Primary Reason	Total	Transfer	Career
Preparation for job or update skills	39%	12%	54%
Preparation for transfer	30%	58%	14%
Interest/self-enrichment/ exploration of new area	29%	29%	29%
Other	2%	1%	3%

What proportion of the graduates achieved their goal?

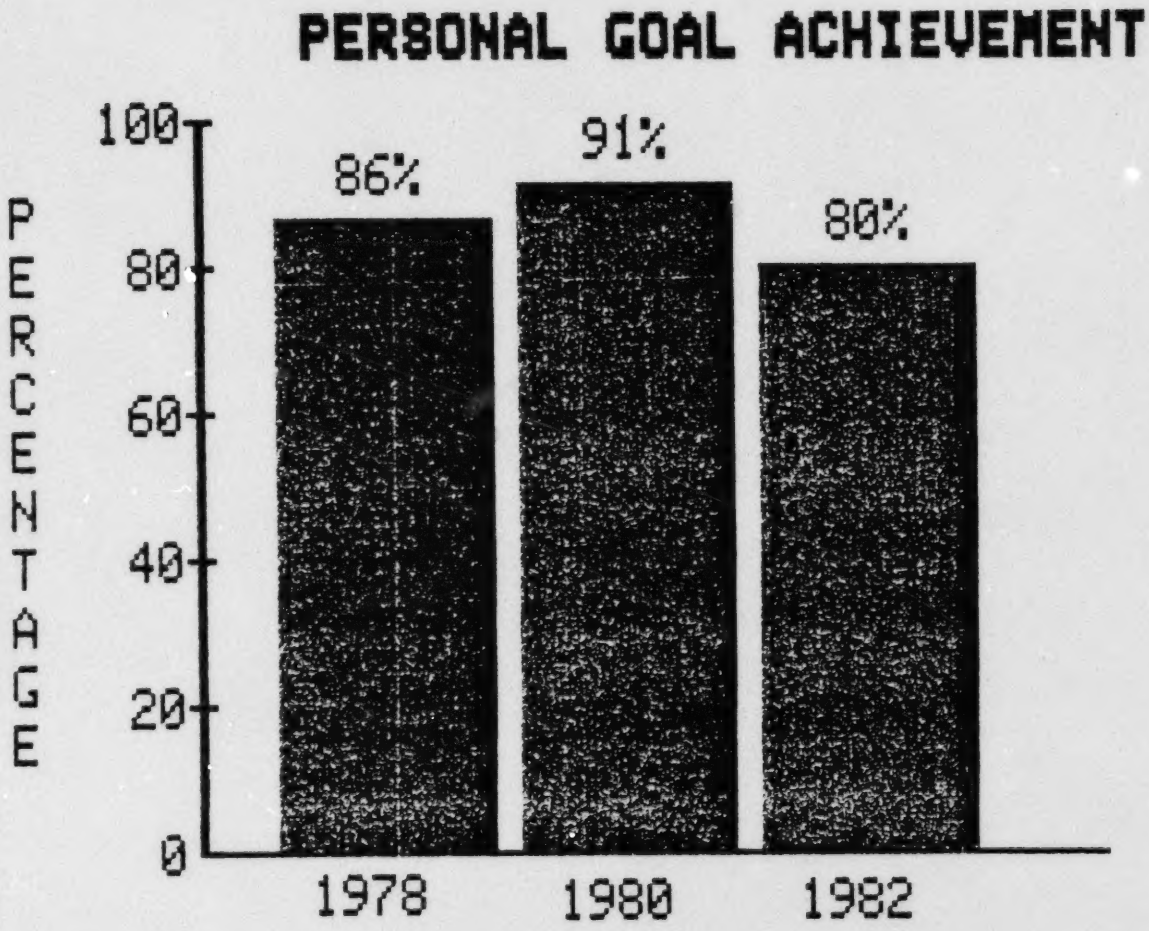
Although still high, in comparison to earlier Harford studies, the graduate achievement rate fell. Eighty percent reported having achieved their goal compared to 86 percent in 1978 and 91 percent in 1980. The Peer Colleges group for 1982 reported a somewhat higher figure of 84 percent.

TABLE 10
GRADUATE FOLLOW-UP 1982
WAS PERSONAL GOAL ACHIEVED?

	1978	1980	1982 Percent	1982 Number	1982 Peer Colleges
Yes	86%	91%	80%	(192)	84%
No	15%	10%	20%	(48)	16%
Total				(240)	

FIGURE 3

GRADUATE FOLLOW-UP 1982

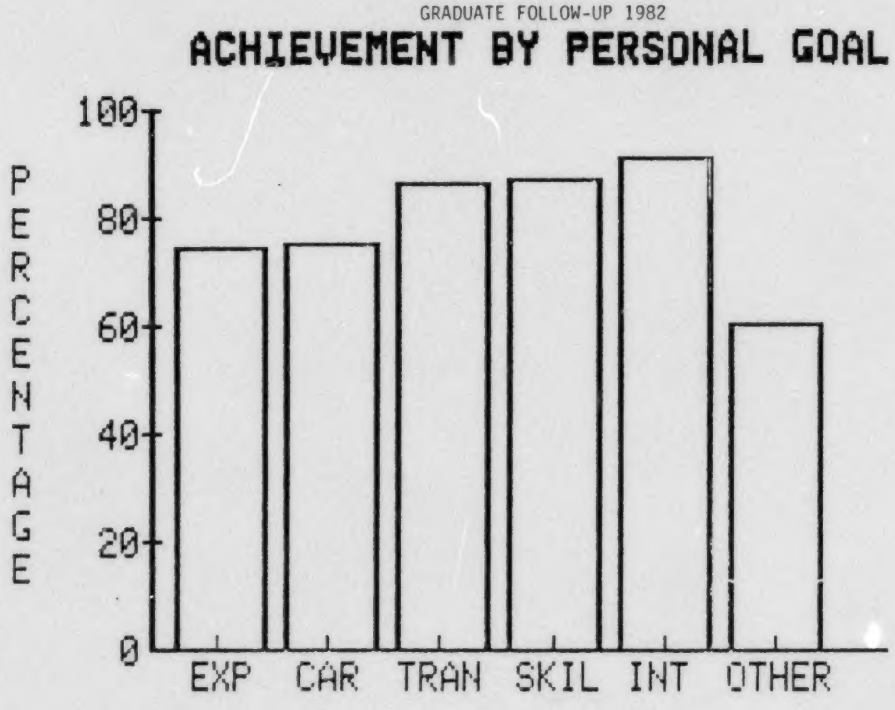


However, achievement rates for some educational goals were much higher than the rates of others. Overall, achievement rates by goal ranged from a low of 74 percent to a high of 91 percent. The exploratory item held the lowest success rate at 74 percent. (This item was also the lowest on the 1978 Entrant Follow-Up Study.) Also meeting with a percentage below the total achievement rate was the choice "preparation for immediate entry into a career" with 75 percent reporting success. About nine out of ten graduates reported success for the remaining goals with 86 percent for the transfer item, 87 percent for the update job skills item, and 91 percent for the interest and enrichment item.

TABLE 11
GRADUATE FOLLOW-UP 1982
GOAL ACHIEVEMENT BY PERSONAL GOAL

Goal Achievement	PERSONAL GOAL Exploration	New Career	Transfer	Update Skills	Interest	Other
Yes	74%	75%	86%	87%	91%	60%
No	26%	25%	15%	13%	9%	40%
Total Number	(43)	(72)	(69)	(15)	(22)	(5)

FIGURE 4
GRADUATE FOLLOW-UP 1982



Achievement rates also varied considerably by academic program. Excluding those programs with less than five graduates, students enrolled in the following programs indicated a high success rate: Business Administration (86 percent), General Business (88 percent), Secretarial Science (85 percent), Mass Communications (86 percent), Data Processing (84 percent), Nursing (95 percent), and Electronics (100 percent). Conversely, graduates of the following programs reported low achievement rates: Arts and Sciences (71 percent), Accounting (60 percent), Interior Design (67 percent), Computer Operator (50 percent), Auto Mechanics (17 percent), and Criminal Justice (62 percent). (A breakdown of goal achievement by educational goal for a specific academic program as well as other detailed information by program is available upon request.)

TABLE 12
GRADUATE FOLLOW-UP 1982
GOAL ACHIEVEMENT BY ACADEMIC PROGRAM*

Program	Yes	No	Total Number
Arts and Sciences	71%	29%	(14)
English	100%	0%	(3)
General Studies	77%	23%	(57)
Education	50%	50%	(2)
Business Administration	88%	12%	(8)
Accounting	60%	40%	(15)
Retail	100%	0%	(1)
Secretarial Science	85%	15%	(20)
Life Insurance	100%	0%	(1)
Communications	86%	14%	(7)
Photography	100%	0%	(3)
Interior Design	67%	33%	(9)
Data Processing	84%	16%	(25)
Computer Programming	79%	21%	(19)
Computer Operator	50%	50%	(30)
Nursing	95%	5%	(73)
General Eng.	100%	0%	(1)
Graphics	0%	100%	(1)
Auto	17%	63%	(6)
Electronics	100%	0%	(5)
Sci. Lab.	67%	33%	(3)
Criminal Justice	62%	38%	(13)
Law Enforcement	75%	25%	(4)

*Includes graduates who responded by mail and those in the telephone sample

Why did graduates choose to come to Harford Community College?

At Harford and across the State the three most important reasons given for choosing to attend a community college consistently have been the following: (1) convenient location, (2) desired program offered, and (3) low cost. Two-tenth's of Harford's graduates chose the College because it offered a specific program, and one-tenth indicated low cost as the principal reason. Two-thirds--more than the comparison Peer Colleges group and more than previous graduate follow-ups--chose convenient location.

The other choices provided received very little response. This was consistent with previous Harford Graduate Follow-Ups and the Peer Colleges group.

TABLE 13
GRADUATE FOLLOW-UP 1982
REASON FOR CHOSING THIS COLLEGE

	1978	1980	1982 Percent	1982 Number	1982 Peer Colleges
Low cost	12%	15%	11%	(25)	15%
Convenient location	58%	60%	65%	(147)	50%
Program I wanted was offered	21%	18%	19%	(44)	28%
Financial aid available	2%	2%	0%	(0)	1%
Unwilling or unable to attend another college	4%	3%	3%	(6)	3%
College's good academic reputation	2%	1%	2%	(5)	3%
Advice of friends	.5%	1%	0%	(0)	
Advice of high school counselor	.5%	0%	.4%	(1)	
Total				(228)	

Transfer

The community college system has its roots in the junior college movement. Junior colleges were designed to provide an academic experience parallel to the first two-years of a four-year institution of higher education. After two years, students were expected to transfer with junior status.

The transfer function is still central to a community college's mission. Recently, David Breneman in a Brooking's Institution study was critical of the degree of success experienced by transfer community college students. This report has been refuted by the Maryland State Board for Community Colleges in regards to the Maryland experience. Maryland community college transfer students typically have very positive experiences.

What proportion of the graduates transferred and what proportion transferred who had transfer as their primary goal? What was the enrollment status of the transfers?

One year after graduation, one-third of the students (excluding those who are still attending Harford) were enrolled in transfer instituitons. This proportion parallels the Peer College group. For students whose primary educational goal was transfer, 77 percent actually did transfer and 80 percent reported goal achievement. This figure is consistent with the Peer Colleges group but shows considerable slippage from Harford's 1978 and 1980 Graduate Follow-Ups. In 1978 and 1980 Harford's results were 83 percent and 89 percent respectively. However, 86 percent of the graduates with this goal self-reported goal achievement which in effect may indicate that students feel well prepared to transfer but did not for personal reasons.

About one-third of Harford's and the Peer Colleges' graduates who transferred attended the transfer institution on a part-time basis. Over the last several Graduate Follow-Ups, the general trend is toward students attending on a part-time basis to a greater extent and conversely working to a greater extent while attending school.

TABLE 14
GRADUATE FOLLOW-UP 1982
RESPONDENTS WHO TRANSFERRED

Group	1978	1980	1982 Percent	1982 Number	1982 Peer Colleges
Total	43%	45%	34%	(82)	36%
With Transfer As Goal	83%	89%	77%	(53)	77%
Enrollment Status					
Part-time	27%	39%	35%	(28)	32%
Full-time	73%	61%	65%	(51)	68%

To what colleges did the graduates transfer?

Nine out of ten of Harford's graduate transfers enrolled in institutions in the state of Maryland. Eight out of ten enrolled in Maryland public institutions with almost half going to Maryland public state colleges and one-fourth enrolling in the University of Maryland. Two-thirds of the students going to Maryland state colleges attend Towson.

The proportion transferring to private institutions dropped dramatically from 23 percent in 1980 to 11 percent in 1982. The Peer Colleges figure is higher at 15 percent. (The 1978 Entrant Study also indicated a much higher percentage of students attending private and/or out-of-state institutions.)

TABLE 15
GRADUATE FOLLOW-UP 1982
LOCATIONS OF HARFORD'S GRADUATE TRANSFERS

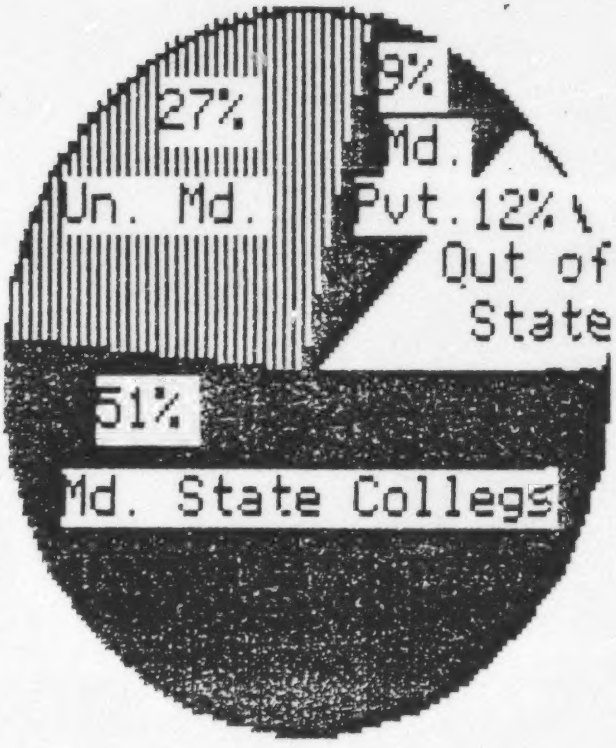
	1978	1980	1982 Percent	1982 Number
Another Maryland Community College	5%	4%	*1%	(1)
Maryland State College	61%	43%	51%	(38)
University of Maryland	9%	18%	27%	(20)
Maryland Private Four-Year	10%	17%	8%	(5)
Maryland Private Two-Year	2%	2%	--	--
Maryland Technical	0	0	1%	(1)
Out-of-State Four-Year Public	6%	12%	9%	(7)
Out-of-State Four-Year Private	5%	4%	3%	(2)
Other Out-of-State	2%	1%	--	--
				(74)

*Excludes eight students who marked Harford Community College as their transfer institution

FIGURE 5

GRADUATE FOLLOW-UP 1982

WHERE HARFORD GRADUATES TRANSFER



How efficient was the transfer process for the graduates?

For many students, the transfer process is a cause for great anxiety with loss of academic credit often cited as one of the causes. However, half of Harford's graduates lost no credit at all and over two-thirds lost less than three credits. These proportions indicate a better transfer record than experienced by the Peer Colleges group, although the results are not quite as positive as earlier Harford studies. The 1978 Entrant Follow-Up study reported an even higher success rate for the entrant population.

However, several students in written comments remarked that the transfer information they received was confusing and/or incorrect and/or that more information should have been available. Several graduates suggested that each student be required to see a counselor. Although the number of graduates making the above comment was small when compared to all graduates, this comment was one of the most frequently voiced.

TABLE 16
GRADUATE FOLLOW-UP 1982
CREDIT HOURS LOST IN TRANSFER

	1978	1980	1982 Percent	1982 Number	1982 Peer Colleges
None	54%	58%	51%	(39)	45%
Lost 1-3	23%	16%	21%	(16)	16%
Lost 4-6	12%	15%	7%	(5)	11%
Lost 7-12	6%	6%	13%	(10)	13%
Lost 13-20	4%	0	7%	(5)	7%
Lost more than 21	0	5%	1%	(1)	7%
Total				(76)	

About two-thirds of the College's graduates transfer into programs directly related to their course of study at Harford. A fourth transfer into programs somewhat related, and about one-tenth move into areas of study not related to their community college program.

Harford's proportions for this item roughly parallel the Peer Colleges group results. In comparison to earlier Harford Follow-Up's, the College continues to improve its performance.

TABLE 17
GRADUATE FOLLOW-UP 1982
RELATIONSHIP OF CURRICULUM PROGRAM TO TRANSFER PROGRAM

	1978	1980	1982 Percent	1982 Number	1982 Peer Colleges
Directly related	45%	61%	65%	(53)	56%
Somewhat related	43%	29%	24%	(19)	36%
Not related	12%	11%	11%	(9)	8%
Total				(81)	

How successful are Harford students at their transfer institution?

Harford students do quite well at their transfer institution. Over 75 percent report having earned a 3.0 grade point average or better and one-third report a 3.5 or greater average. Only about 10 percent earned a 2.1 or less. These results show progress over the 1978 and 1980 Harford Graduate Follow-Ups that yielded a 3.0 or above GPA of 55 percent and 66 percent respectively. Harford's results are also more positive than the Peer Colleges group percentages. However, self-reported grades are often more positive than grades officially recorded.

TABLE 18
GRADUATE FOLLOW-UP 1982
TRANSFER GRADE POINT AVERAGE

	1978	1980	1982 Percent	1982 Number	1982 Peer Colleges
Below 2.0	3%	3%	6%	(5)	2%
2.0 - 2.4	5%	8%	4%	(3)	9%
2.5 - 2.9	25%	23%	13%	(10)	23%
3.0 - 3.4	29%	36%	43%	(34)	37%
Above 3.5	26%	30%	34%	(27)	30%
Total				(79)	

The above self-reported data is substantiated by reports generated by public four-year Maryland institutions which detail the academic performance of community college students. (A more complete description is available upon request of the Office of Institutional Research.)

Transfer institutions report that the vast majority of Harford graduates are doing well at their new institutions. In general, they do as well as community college transfer students as a whole and as well as the transfer institutions' native students.

For example, the latest data received from the University of Maryland, College Park, indicates that 77 percent of Harford students are in good academic standing. This compares to 81 percent for all community college students and 84 percent for all UMCP undergraduates. The mean grade point average for all Harford students in attendance at UMCP in 1982 was 2.7--the second highest in the community college system.

What rating did Harford's graduates give their preparation for transfer?

Ninety-seven percent of the College's graduates were satisfied (67 percent) or extremely satisfied (30 percent) with their preparation for transfer. Only 3 percent felt unsatisfied.

These results are somewhat better than the Peer Colleges group and earlier Harford studies. Especially encouraging is the proportion indicating dissatisfaction which has been reduced from a high of 12 percent in 1980 to 3 percent in 1982.

TABLE 19
GRADUATE FOLLOW-UP 1982
SATISFACTION WITH PREPARATION FOR TRANSFER

	1978	1980	1982 Percent	1982 Number	1982 Peer Colleges
Extremely satisfied	36%	31%	30%	(24)	34%
Satisfied	58%	57%	67%	(53)	58%
Unsatisfied	7%	12%	3%	(2)	8%
Total				(79)	

However, several students in written comments complained about a lack of academic rigor at Harford and suggested that higher academic standards and greater work loads be instituted. Although the number of graduates writing the above comment was small when compared to all graduates, this comment was one of the most frequently voiced.

Career Development

Career programs at HCC have been growing in recent years. In 1978, 45 percent of the College's enrollment was in the career area, and 40 percent of the awards were occupational. In 1981, 49 percent of the enrollment and 55 percent of the awards were in the career area.

What is the current employment status of the graduates?

A year after finishing their program 74 percent of the graduates were working. Thirty percent were working part-time and 70 percent held full-time positions. These figures are similar to the results of the Peer Colleges and to earlier Harford studies.

Seventy-four percent of the students at Harford who indicated a goal of "immediate entry into a career" had full-time positions. Harford's results are somewhat better than the Peer Colleges' and parallel earlier Harford studies. Over half of those graduates employed full-time began their job before (20 percent) or while (34 percent) attending the College.

TABLE 20
GRADUATE FOLLOW-UP 1982
CURRENT EMPLOYMENT CHARACTERISTICS

	1978	1980	1982 Percent	1982 Number	1982 Peer Colleges
Part-time	32%	33%	30%	(54)	31%
Full-time	68%	67%	74%	(126)	70%
Total	71%	76%	74%	(180)	
Employment Goal and Full-time Employed	75%	76%	74%	(65)	70%
Time Job Began					
Before Attending	26%	25%	20%	(25)	19%
While Attending	14%	27%	34%	(42)	27%
After Attending	61%	48%	46%	(56)	54%

Was the graduate's job related to his current position?

Of those working full-time, over half held positions directly related to their college program and an additional one-fourth had jobs that were somewhat related. Nearly 20 percent held jobs not related, and this figure has been increasing over the last two Harford Graduate Follow-Ups. Of those giving specific reasons why their job was unrelated, almost two-thirds gave the reason "no jobs in my field." Graduates of the Computer Programmer and the Computer Operator programs had full-time jobs not related to their program to a much higher degree than did graduates overall.

TABLE 21
GRADUATE FOLLOW-UP 1982
RELATIONSHIP OF PROGRAM TO JOB

	1978	1980	1982 Percent	1982 Number	1982 Peer Colleges
Directly related	58%	52%	53%	(67)	56%
Somewhat related	30%	32%	28%	(35)	26%
Not related	12%	16%	19%	(24)	17%
Total				(126)	

In what location were Harford's graduates (full-time only) employed?

Ninety-five percent of Harford's graduates are employed in Maryland. Over half are employed in Harford County and about one-tenth in Baltimore City. Almost a third are employed in other Maryland counties. Employment patterns have remained fairly consistent over the last several follow-ups.

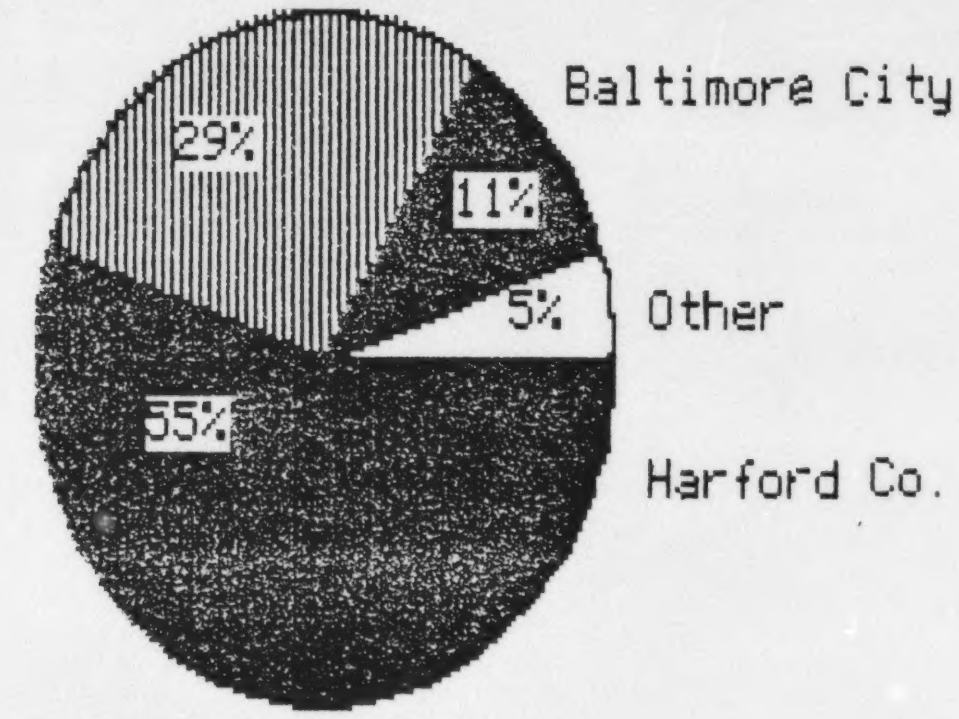
TABLE 22
GRADUATE FOLLOW-UP 1982
EMPLOYMENT LOCATION OF GRADUATES

	1978	1980	1982 Percent	1982 Number
Harford County	51%	46%	55%	(69)
Other Maryland County	22%	27%	29%	(36)
Baltimore City	19%	18%	11%	(14)
Other	8%	9%	5%	(7)

FIGURE 6

GRADUATE FOLLOW-UP 1982

EMPLOYMENT LOCATION OF GRADUATES



How satisfied were the graduates with their preparation they received at the community college?

Ninety-six percent of the respondents were extremely satisfied (33 percent) or satisfied (63 percent) with their preparation for employment. These figures are roughly comparable to the Peer Colleges' results and show some improvement over previous Harford studies.

However, several students in written comments complained about the College's lack of placement services. They perceive job referral as a needed and appropriate function of the College.

Also, although this group reported a very high degree of satisfaction and goal achievement, many nursing students strongly urged the College to provide more clinical experience.

Although the number of graduates making the above comment was small when compared to all graduates, this comment was one of the most frequently voiced.

TABLE 23
GRADUATE FOLLOW-UP 1982
SATISFACTION WITH JOB PREPARATION

	1978	1980	1982 Percent	1982 Number	1982 Peer Colleges
Extremely satisfied	25%	26%	33%	(40)	35%
Satisfied	69%	68%	63%	(77)	60%
Unsatisfied	5%	6%	4%	(5)	5%
Total				(122)	

Were the unemployed graduates seeking work? Of these, why were they unable to get a job?

Of the 27 graduates who were not working, about half were seeking a job. These unemployed job seekers gave one of the following reasons for not finding a job: (1) too few openings (27 percent), (2) need more education (36 percent), (3) have not looked long enough (27 percent), and (4) changed career objectives (9 percent).

TABLE 24
GRADUATE FOLLOW-UP 1982
STATUS OF UNEMPLOYED GRADUATES

	1982	
	Number	Percent
Status		
Seeking a job	(14)	52%
Not seeking a job	(13)	48%
Reason Unable to Get a Job		
Salary too low	--	--
Too few openings	(3)	27%
Need more education	(4)	36%
Changed career objectives	(1)	9%
Had not looked long enough	(3)	27%

What were the salaries earned by the graduates?

The "traditional" college student attended the university for four years as a full-time student and soon after graduation started a full-time job in his field of preparation. Most community college students do not fit that mold.

Therefore, it is difficult to examine salary without taking several variables into account. The most important of these variables are "when the job began," and "whether the job is related to the college program." For purposes of analysis only those graduates who were working full-time in positions directly or somewhat directly to their college program were included.

The average salary for the 81 graduates meeting the above criteria and responding was just over $14,000. As expected, the average salary for the graduates who started their current position before or while attending Harford was somewhat higher at just over $16,000. These salaries ranged from a low of $6,867 to a high of $36,000. The average salary for graduates with current jobs began after graduation was lower at just under $13,000. These salaries ranged from a low of $6,448 to a high of $18,894.

The only program with a large enough number of responses to provide useful data (and to maintain confidentiality) was nursing. Nursing graduates average just over $16,000 annual salary.

TABLE 25
GRADUATE FOLLOW-UP 1982
AVERAGE SALARY OF GRADUATES

	Average	Number of Graduates
With Current Positions Held Before or During Attending Harford	$16,015	44
With Current Positions Held After Attending Harford	$12,996	37
Total	$14,269	81

Special Populations

The Traditional Student

What was the experience of the "traditional" college graduate?

Community colleges serve many types of students among which are the traditional college student. These students are typically described as just out of high school, attending college full-time, and enrolled in a transfer curriculum. This population has always been an important segment of the college and may increase in total numbers and/or as a percent of the total available population coming to Harford. The sample of Harford graduates contained 31 "traditional" students--13 percent of the total.

Over 80 percent of these students attended the community college intending to transfer or to explore a career or academic area. Overall, about 9 out of 10 reported having achieved their goal. Similarily, 90 percent of those graduates who wanted to transfer did indeed transfer.

Over two-thirds of these transferred as full-time students. Ninety percent transferred into programs directly or somewhat related to their community college program. Two-thirds lost three credits or less when transferring. Almost half have earned a GPA of 3.0 or better at their transfer institution.

These graduates were quite satisfied with their preparation for transfer. Only 5 percent reported that they were unsatisfied. They were also satisfied with the instruction they received (90 percent) and with the college as a whole (97 percent).

The Returning Woman

What was the experience of the "returning woman" college graduate?

In recent years the national phenomenon of large numbers of females returning to school ten or more years after high school has received considerable attention by the higher education community. This trend has been experienced at HCC and continuing women are considered to be an important element of the student body. Following below is a breakdown of the graduate data for women in their late twenties to late fifties. The sample of Harford graduates contained 64 returning women--26 percent of the total.

Over two-thirds of these women earned AA degrees and one-third earned certificates. Just under two-thirds are enrolled in occupational programs and over one-third in transfer curricula. They are represented in all program areas with Business Administration (22 percent), Nursing (19 percent), and General Studies (13 percent) comprising the largest major categories.

Two-thirds attend part-time. Students typically have very high grade point averages. Over half earned GPA's of 3.5 or better.

A year after graduating 41 percent were in school, 60 percent employed, 17 percent not employed, and 41 percent had full-time home responsibilities. (Please note that a respondent could check more than one status item.)

About one-third of this group came to the College for career reasons, about one-fourth intended to transfer to a four-year institution, and just under one-third were exploring an academic or career area. The remainder came for personal enrichment. Overall, 80 percent reported that they achieved their personal goal. Goal achievement was very high for "transfer" and lower for "exploration" and "new career." The 62 percent indicating a new career goal and goal achievement was quite low.

About one-third of the returning women transfer to a four-year institution (100 percent in Maryland). Like their community college GPA, transfer averages are very high--60 percent at or above 3.5. About two-thirds lose no credits when transferring and about two-thirds transfer in programs directly related to their major at Harford. No respondent reported dissatisfaction with the preparation they received for transfer.

A year after graduating 30 percent of the returning women were working part-time and 70 percent were working full-time. Of those working full-time, just under one-third started their job after graduation and equal numbers started before or while attending. Over two-thirds work in Harford County and all but one graduate is employed in Maryland. Over two-thirds were employed in jobs directly or somewhat related to their College program. About nine in ten were extremely satisfied or satisfied with their career preparation. One in ten was dissatisfied.

No respondent was dissatisfied with the College as a whole or with the instruction they received.

Employer Evaluation

As part of the Graduate Study, graduates were asked the title of their current position and their employer's name and address. They were also asked to give the College permission to contact their employer for the purpose of evaluating their community college program.

If a graduate was working full-time in a position directly or somewhat related to their college program and had given permission, the employer was sent a questionnaire. The questionnaire was designed to evaluate the graduate's preparation for work. (See Appendix C.) The following is an analysis of this survey.

How many full-time career graduates working in jobs related to their college program gave permission to contact their employers?

Over two-thirds of the graduates gave permission to contact their employers. This result is similar to earlier Harford studies and the Peer Colleges. Although a two-thirds' response rate is considered quite acceptable, it can be reasonably argued that graduates doing poorly would not give permission to contact their employers. Since the SBCC has no ethical way to research this question, an interpretation of the results must be tempered with the possibility that the "true" picture may be somewhat less positive.

TABLE 26
GRADUATE FOLLOW-UP 1982
GAVE PERMISSION TO CONTACT EMPLOYER

	1978	1980	1982 Percent	1982 Number	1982 Peer Colleges
Yes	65%	67%	66%	(79)	66%
No	35%	33%	34%	(34)	34%

From the above 79 that gave permission, 61 were eligible (full-time employed in jobs related to major). Forty-eight of the 61 employers who received a questionnaire responded.

Fourteen career programs are represented in the sample. The nursing program responses comprise one-third of the total and the data processing program 15 percent. All other programs had four or less respondents.

The results reported below were in all but a few cases quite similar to the results of earlier Harford Employer Studies.

How did the employers rate the college preparation of the graduate as adequate in the following areas: (1) performance of job skills, (2) familiarity with test and laboratory equipment required by the job, (3) ability to learn new techniques on the job, (4) ability to communicate with superiors, and (5) ability to work well with other workers?

In general, Harford graduates are considered to be very well prepared for their occupations. The most positive response concerned the graduates' ability to communicate with their superiors and fellow workers and to learn new techniques on the job. Only 2 percent or less were rated as inadequate by their employer on these items. About half of the graduates were rated as more than adequate.

The item "performance of job skills" also received a highly positive response. Ninety-five percent received more than adequate (28 percent) or adequate (67 percent) responses. Five percent were rated inadequate. The last remaining item, "familiarity with test and laboratory equipment," was rated high but less so than the other items. Ninety-two percent of the graduates were rated more than adequate (19 percent) or adequate (73 percent). Eight percent were considered inadequate.

TABLE 27
GRADUATE FOLLOW-UP 1982
RATINGS OF ADEQUACY OF GRADUATES BY EMPLOYERS

Item	More Than Adequate	Adequate	Inadequate	Number Cases
Performance of job skills	28%	67%	5%	46
Familiarity with test and laboratory equipment	19%	73%	8%	37
Ability to learn new techniques	51%	49%	0%	47
Ability to communicate with superiors	47%	51%	2%	47
Ability to work well with other workers	47%	51%	2%	47

How do the employers rate the vocational training as it relates to the graduate's job in the areas of technical knowledge, work attitude, and work quality?

In general Harford graduates are rated very high as to the vocational training they received at the community college. Approximately eight out of ten evaluators rated Harford graduates as very good or good for the items "technical knowledge," "work attitude," and "overall rating." Nine out of ten evaluators rated graduates as very good or good on the item "work quality." Two percent or less of the evaluators rated students as poor or as very poor on any of the items.

TABLE 28
GRADUATE FOLLOW-UP 1982
RATINGS OF THE VOCATIONAL TRAINING RECEIVED BY GRADUATES

Item	Very Good	Good	Neutral	Poor	Very Poor	Number of Cases
Technical knowledge	36%	43%	18%	2%	0%	44
Work attitude	47%	36%	18%	0%	0%	45
Work quality	40%	51%	4%	2%	2%	45
Overall rating	24%	60%	13%	2%	0%	45

How do community college graduates compare to other employees? Would you employ another graduate?

Of those employers who had a basis to compare graduates to other employees, 61 percent rated the graduates as better prepared, 28 percent as about the same, and 11 percent as less well prepared. Over 9 out of 10 employers would employ another graduate in the same area as their current employee.

TABLE 29
GRADUATE FOLLOW-UP 1982
COMPARISON OF GRADUATES' WORK WITH OTHERS

	Number	Percent
Better prepared	(22)	61%
About the same	(10)	28%
Less prepared	(4)	11%
Employ another graduate?	(44)	94%

How often is a community college degree required or preferred in hiring for the position?

About one-fourth of the employers require at least an associate degree for the position in question. Over two-thirds do not require an AA, and of these, one-third give preference to AA's and one-third do not. The number of employers marking the item "no preference" includes nursing employers who hire nurses that earn their licenses in one of several ways.

TABLE 30
GRADUATE FOLLOW-UP 1982
IS A TWO-YEAR AA DEGREE REQUIRED?

	Number	Percent
Yes	(12)	26%
No, but preference given	(17)	37%
No, no preference	(17)	37%

OVERALL EVALUATION

How satisfied were the graduates with the quality of classroom instruction in their community college program and how satisfied were they with the overall quality of the college?

Harford graduates indicated a very high degree of satisfaction with both classroom instruction in their program of study and with the quality of the College overall. Ninety-eight percent were satisfied with instruction with 36 percent extremely satisfied and 62 percent satisfied. Ninety-nine percent were satisfied with the quality of the College with 37 percent extremely satisfied and 62 percent satisfied. Of the 483 responses to these two questions, only six were marked unsatisfied.

These results are similar to the results for earlier Harford studies and the Peer Colleges. A high degree of satisfaction was also reported in the 1978 Entrant Follow-Up Study and for the 1980 Continuing Education report.

TABLE 31
GRADUATE FOLLOW-UP 1982
SATISFACTION WITH INSTRUCTION IN PROGRAM AND
SATISFACTION WITH QUALITY OF COLLEGE

Satisfaction with Instruction in Program	1978	1980	1982 Percent	1982 Number	1982 Peer Colleges
Extremely Satisfied	37%	34%	36%	(87)	43%
Satisfied	62%	63%	62%	(150)	54%
Unsatisfied	1%	3%	2%	(4)	3%
Total				(241)	

Satisfaction with Quality of College	1978	1980	1982 Percent	1982 Number	1982 Peer Colleges
Extremely Satisfied	40%	32%	37%	(90)	45%
Satisfied	60%	66%	62%	(150)	54%
Unsatisfied	1%	2%	1%	(2)	1%
Total				(242)	

SUMMARY AND RECOMMENDATIONS

This study is part of a continuing effort by Harford Community College to analyze student educational outcomes. Its primary purpose is to evaluate the extent to which the College assisted graduates in their educational goals, their preparation for transfer, and their career development. The study compares the results of Harford's 1982 Graduate Follow-Up with the results of the 1982 Graduate Study for colleges in Maryland of similar size and with earlier Harford Graduate studies.

The report examines survey responses of students one year after they graduated. The response rate was 55 percent for all questions and over 95 percent for a subset of questions. In addition, 48 employers of Harford graduates added their perception of student performance.

Characteristics and Current Status

Among the characteristics examined, two-thirds of the graduates were females, or under 29 years of age, or enrolled in a career program. Eighty percent had earned an AA degree and one-third maintained cumulative GPA's of 3.50 or better. Over 90 percent were white. Sixteen percent were still enrolled at Harford.

Although many Harford students are just out of high school and attend full-time, the majority of students experience very different enrollment patterns. The median number of years from initial enrollment to graduation for AA students attending full-time was 2 1/2 years and 4 1/2 years for those attending part-time. Over two-thirds of the full-time students earning a certificate graduated in one year. The median number of years to graduation for part-time certificate seekers was 2 1/2 years.

However, academic curricula, as detailed in the College catalog and other sources, present course sequences based on the assumption of a standard course progression for a full-time student. It is therefore recommended that College publications emphasize several possible course progressions to reflect more accurately the nature of the College's student population. Special attention should be given to the part-time student. In this regard, a new format which reflects various enrollment patterns has already been devised. The new format will be reflected in the College catalog and all curricula brochures.

The employment status of graduates immediately prior to attending the College varies widely. Some students attended the College because they were laid off or because their job was eliminated. However, 59 students (28 percent of the total) indicated that their status prior to attending the College was in a dead-end job. This research finding may indicate a fruitful avenue for student recruitment. It is therefore recommended that the Admissions Office and the Office of Community Relations along with the Research Office further probe the finding in order to judge the potential impact of a marketing effort aimed at this population.

The status of graduates a year after graduation also varies widely. Over

two-thirds of the graduates were employed. About half were employed and not attending school and of these 77 percent were working full-time. About one-fifth of the graduates were employed and had transferred--60 percent of these were working full-time. Sixteen percent transfered and were not working. In all 38 percent had transferred. Eleven percent of the graduates were not employed and of these 52 percent were seeking work. Seventeen percent were working full-time as homemakers.

Educational Goals

Reflective of a national trend, the percentage of students attending community colleges intending to transfer is on the decline. In 1982, 30 percent of Harford's respondents reported "transfer to a four-year institution" as their primary educational goal. In 1980 this figure was 37 percent.

This trend is also indicated by the decline in the number of graduates who are in school a year later and will be further exacerbated by a decline in recent high school graduates. It is therefore recommended that the College continue to monitor the decline in the number of transfer students and take proactive steps to counter its impact. This trend will especially affect Admissions, academic programs, and counseling.

On the other hand, the proportion of students choosing career development as an educational goal has remained steady. In 1982, 39 percent of the graduates had career goals with 32 percent seeking to prepare for immediate entry into a career and 7 percent attempting to update skills for a job currently held.

The results of the next item, "exploration of a new career or academic areas," are surprising. The percentage of graduates indicating this choice has increased from a low of 10 percent in 1978 to a high of 19 percent in 1982.

Finally, one-tenth of Harford's graduates attend primarily for their own interest and self-enrichment. This figure has remained stable over the last three follow-up studies.

Goal Achievement

Although still high, the graduate achievement rate fell in comparison to earlier Harford studies. Eighty percent of the graduates reported having achieved their goal compared to 86 percent in 1978 and 91 percent in 1980. It is therefore recommended that the goal achievement rates for specific goals that fall below expectations be given particular attention. Specific, suggested activities are detailed in recommendations that speak directly to individual goals.

As expected, achievement rates for some educational goals were much higher that the rates of others. Overall achievement rates by goal ranged from a low of 74 percent to a high of 91 percent.

The "exploratory" item held the lowest success rate at 74 percent. (This item was also the lowest on the 1978 Entrant Follow-Up Study.) This finding is especially significant because the number of students choosing this goal is in-

creasing. It is therefore recommended that current efforts underway to identify and assist students choosing exploration as an educational goal be closely monitored by the Counseling Center and that these efforts be altered or intensified as deemed appropriate.

Also meeting with a percentage below the total achievement rate was the choice "preparation for immediate entry into a career" with 75 percent reporting success. The proportion of students with career aspirations has also been increasing over recent years.

One apparent explanation is found in the increasing number of graduates with full-time jobs not related to their college program. Nearly one in five fall into this group, and for some programs this figure is much higher. Related to this finding are the comments written by several students which criticize the College for its lack of placement services. (Only one-third of the career-oriented students in the 1978 Entrant Study reported that their academic program helped them get a job.) In light of the above finding, it may be appropriate for the College to re-examine its position on services related to career placement and perhaps intensify some existing programs. The College presently allocates this role to the teaching faculty and career resources of the Counseling Center. The College also offers several experiential education programs which include co-op education, field placements, career infusion, and internships.

About nine out of ten graduates reported success with the remaining goals. Eighty-six percent reported achievement for the transfer item, 87 percent for the "update job skills" item, and 91 percent for the "interest and enrichment" item.

Further, the goal achievement rates for some academic programs fell considerably below the average. Some programs fell as low or lower than 50 percent success. It is therefore recommended that the appropriate Associate Deans and Program Coordinators carefully scrutinize specific breakdown of the data for these programs.

Transfer Function

One year after graduation, one-third of the students were enrolled in transfer institutions. For students whose primary educational goal was transfer, 77 percent did transfer and 86 percent reported goal achievement. This figure is consistent with the Peer Colleges group but shows considerable slippage from Harford's 1978 and 1980 Graduate Follow-Ups.

Nine out of ten of Harford's graduate transfers enrolled in institutions in the state of Maryland. Eight out of ten enrolled in Maryland public institutions with almost half going to Maryland public state colleges and one-fourth enrolling in the University of Maryland. Two-thirds of the students enrolling in Maryland state colleges attend Towson.

When transferring, half of the graduates lost no credit at all and over two-thirds lost less than three credits. These proportions indicate a better transfer record than experienced by the Peer Colleges group, although the results are not quite as positive as earlier Harford studies.

Over 75 percent report having earned a 3.0 grade point average or better and one-third report a 3.5 or greater average. Only about 10 percent earned a 2.1 or less. These results show progress over the 1978 and 1980 Harford Graduate Follow-Ups that show a 3.0 or above GPA of 55 percent and 66 percent respectively. Harford's results are also more positive than the Peer Colleges group percentages. However, self-reported grades are often more positive than grades officially recorded.

In recent times, community colleges have gotten "bad press" concerning their transfer role despite the reported data. In this light, the positive findings reported in the study need to be communicated to the College and to the general public to counter any misunderstanding and to augment Harford's image as a quality institution. The most important messages conveyed by the data are:

(1) Almost all Harford students who want to transfer do indeed transfer.

(2) HCC students transfer with all or most of their credits intact.

(3) Students' grades at the transfer institutions tend to be as good as students who started at the four-year school.

It is therefore recommended that the Office of Community Relations coordinate the College's efforts to publicize the positive transfer experience of Harford's students to the general public and that Admissions and Counseling coordinate internal dissemination concerning transfer achievement. Two target populations of particular interest are recent high school graduates and their parents.

Career Development

Seventy-five percent of those graduates who wanted full-time employment achieved their goal. Overall, 74 percent of the graduates were working. Thirty percent were working part-time, and 70 percent held full-time positions. Over half of these graduates who were employed full-time began their job before or while attending the College, and over 75 percent held positions directly or somewhat related to their College program. Ninety-five percent are employed in Maryland. Over half are employed in Harford County, one-tenth work in Baltimore City, and almost a third are employed in other Maryland counties. The average salary of the graduates was just over $14,000.

In times of fiscal restraint, public institutions which rely on government funding have been carefully scrutinized. An important argument supporting county funding for community colleges has been the positive economic impact of the college on the community. It is therefore recommended that the positive experience of career graduates and especially the finding that over one-half of the graduates employed full-time are working in Harford County be used in seeking a continued high level of county support.

Special Populations

The Graduate Follow-Up Study analyzed two subpopulations of the total graduates which have particular impact on the College.

One group, the "traditional college student," comprised 13 percent of the total graduates. This group is typically described as just out of high school, attending college full-time, and enrolled in a transfer curriculm. In general, this group has been quite successful. In the future, these students will be more difficult to recruit because of their declining numbers in Harford County and because of increased interinstitutional competition. In this light, it is recommended that the positive findings concerning the "traditional student" be used as a marketing/recruitment tool.

Another special population, the "returning woman," comprises 26 percent of the total graduate population. Typically, this group is defined as females returning to school ten or more years after graduation from high school.

Over two-thirds of this group are in career programs and two-thirds attend school part-time. Typically, they do quite well at the College and in general meet their educational objectives. However, one educational goal, "preparation for a new career," received a very low achievement rate of 62 percent. It is therefore recommended that the College carefully examine why returning women who express "new career" as a goal are successful only 62 percent of the time.

Employer Evaluation

In general, employers of HCC graduates were satisfied with the graduates' community college preparation and rated the College's programs high. In particular, the employers rated graduates high on job skills, familiarity with equipment, and technical knowledge. In addition, the employers rated the graduates high on their ability to learn new techniques, work quality, ability to communicate, ability to work well with others, and work attitude. Over 90 percent would employ another graduate. These findings should be widely disseminated.

However, only six out of ten employers thought the graduates better prepared than other workers in similar jobs--one in ten were ranked as less well prepared. It is therefore recommended that the finding that six in ten graduates were ranked as better prepared than other employees be used as a benchmark to measure institutional efforts toward higher quality. (However, this finding is biased by the large percentage of nursing employers that responded. Nurses who graduate from a three-year, more clinical program are often viewed as more desirable.)

An important recruitment tool for any career program is the prospect of a job after completing a program. However, only one-fourth of the employers of Harford graduates reported that their position required an AA degree and over one-third gave no preference. Based on these findings, it is recommended that appropriate career programs be re-evaluated in regard to career requirements for initial employment and that an effort be made to convince employers of the

advantages of hiring College graduates. Career advisory committees can be of great assistance in this process.

Student Satisfaction

The graduate survey asks all students if they were satisfied with the College as a whole and with the instruction they received and asks the appropriate students if they were satisfied with career preparation and with transfer preparation. Although the percentage of students responding "not satisfied" to all of these questions is small (less than 5 percent), the percentage responding "very satisfied" is consistently almost half that of the students reporting satisfaction. With the College's re-emphasis on academic quality, it is recommended that the student satisfaction figures be used as an effective benchmark to measure improvements in the College overall, instruction, transfer, and career development.

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The President and the Dean of the College will assign appropriate members of the College community with the responsibility of following up on the proposed recommendations. In this regard, subsequent actions taken by the College will be reflected in future follow-up studies.

The Research Office will conduct its next follow-up study in the spring of 1984. At that time, all first-time students who graduated in 1980 will be surveyed.

MARYLAND PUBLIC COMMUNITY COLLEGES GRADUATE FOLLOW-UP QUESTIONNAIRE

The purpose of this questionnaire is to help your community college and the State Board for Community Colleges assess and improve their programs. Please complete it promptly and return it in the envelope provided. This form should require less than 10 minutes to complete. All answers will be strictly confidential. Thank you for your assistance.

(Please make corrections if necessary.)

_____
(Name)

_____
(Address)

_____

ALL GRADUATES SHOULD COMPLETE PART I.

PART I.

A. Check the items that describe your current status. (check as many as apply)

37 [ ] In school
38 [ ] Employed
39 [ ] Not employed
40 [ ] Full-time home responsibility
41 [ ] In active military services
42 [ ] Other (specify) _____

B. Check the one statement which most closely corresponds to your primary reason for attending this community college. (check one)

[ ] 1. Exploration of new career or academic areas
[ ] 2. Preparation for immediate entry into a career
43 [ ] 3. Preparation for transfer to a four-year institution
[ ] 4. Update skills for a job currently held
[ ] 5. Interest and self-enrichment
[ ] 6. Other (specify) _____

C. Was your goal (indicated in Item B) achieved by the time you graduated from this community college? (check one)

44 [ ] 1. Yes
[ ] 2. No

D. How satisfied were you with the quality of classroom instruction in your program of study? (check one)

[ ] 1. Extremely satisfied
45 [ ] 2. Satisfied
[ ] 3. Unsatisfied

E. How satisfied were you with the overall quality of this community college? (check one)

[ ] 1. Extremely satisfied
46 [ ] 2. Satisfied
[ ] 3. Unsatisfied

F. What was the **most important** reason you chose this community college? (check one)

[ ] 1. Low cost
[ ] 2. Convenient location
[ ] 3. Program I wanted was offered
47 [ ] 4. Financial aid was available
[ ] 5. Unwilling or unable to attend another college
[ ] 6. College's good academic reputation
[ ] 7. Advice of friends
[ ] 8. Advice of high school counselor

G. What year did you first start attending this community college?

48-49 19_____

H. Did you attend this community college primarily on a part-time or full-time basis?
50 [ ] 1. Part-time (11 credits or less per term)
[ ] 2. Full-time (12 credits or more per term)

I. Check the item that describes your status immediately before you first began attending this community college. (Check one)
[ ] 1. Was in a dead-end job and needed training to move ahead
[ ] 2. Was in a job that was likely to be eliminated
51 [ ] 3. Was laid off and needed to train for another occupation
[ ] 4. Other, Please specify_____

IF YOU ARE IN SCHOOL, COMPLETE PART 2; OTHERWISE, GO TO PART 3.

PART 2.

J. What type of school are you currently attending? (check one)
[ ] 1. Another Maryland public community college
[ ] 2. A public State college in Maryland
[ ] 3. The University of Maryland
[ ] 4. Maryland private four-year college or university
52 [ ] 5. A private two-year Maryland college
[ ] 6. Maryland technical or commercial school
[ ] 7. Out-of-state four-year public college or university
[ ] 8. Out-of-state four-year private college or university
[ ] 9. Other out-of-state college or university

Enter name of school here:
_____
_____

K. What is your enrollment status in the school indicated above?
53 [ ] 1. Part-time
[ ] 2. Full-time

L. Indicate your overall grade point average for credits earned at the transfer school (based on a 4-point scale).
[ ] 1. Less than 2.0
[ ] 2. 2.0-2.4
[ ] 3. 2.5-2.9
54 [ ] 4. 3.0-3.4
[ ] 5. 3.5 and over
[ ] 6. Have not yet completed a full semester

M. To what extent was your curriculum program at this community college related to your major at the transfer school?
55 [ ] 1. Directly related
[ ] 2. Somewhat related
[ ] 3. Not related

N. How satisfied were you with your preparation for transfer?
56 [ ] 1. Extremely satisfied
[ ] 2. Satisfied
[ ] 3. Unsatisfied

O. How many credit hours earned at this community college were not accepted at the transfer school?
[ ] 1. All credit hours accepted
[ ] 2. Lost 1-3 credit hours
[ ] 3. Lost 4-6 credit hours
57 [ ] 4. Lost 7-12 credit hours
[ ] 5. Lost 13-20 credit hours
[ ] 6. Lost more than 21 credit hours

IF YOU ARE EMPLOYED, COMPLETE PART 3; OTHERWISE, GO TO PART 4.

PART 3

P. Your current employment status.

58
[ ] 1. Employed part-time
[ ] 2. Employed full-time

Q. What is the title of your current position?

_____

Employer's name and address:

59-61 S O C

_____

_____

_____

R. Will you give the college permission to contact your employer for the purpose of evaluating your community college program?

[ ] 1. Yes
[ ] 2. No

62 Supervisor's name: _____

Supervisor's title: _____

S. When did you begin your present job? (check one)

63
[ ] 1. Before attending this community college
[ ] 2. While attending this community college
[ ] 3. After graduating from this community college

T. Geographic location in which you are presently employed. (check one)

64
[ ] 1. Same county/city as this community college
[ ] 2. Other county in Maryland
[ ] 3. Baltimore City
[ ] 4. Washington, D.C.
[ ] 5. Delaware
[ ] 6. Pennsylvania
[ ] 7. Virginia
[ ] 8. West Virginia
[ ] 9. Other state

U. Relationship between your program at this community college and your job. (check one)

65
[ ] 1. Program directly related to job
[ ] 2. Program somewhat related to job
[ ] 3. Program not at all related to job

V. If your job is **not** related to your program of study, check the major reason below. (check one)

66
[ ] 1. Could not find job in field of preparation
[ ] 2. Better pay in field in which employed
[ ] 3. Better opportunity for advancement in field in which employed
[ ] 4. Did not want to work in the field of preparation
[ ] 5. Program of study at this college was not career-oriented
[ ] 6. Other (please explain) _____

67-70 W. If you are employed *full-time*, what is your current salary (without overtime and before deductions)?

$_____ per (check one)

71 [ ] 1. Hour
[ ] 2. Week
[ ] 3. Month

X. How satisfied are you with your community college preparation for employment? (check one)

72 [ ] 1. Extremely satisfied
[ ] 2. Satisfied
[ ] 3. Unsatisfied

IF YOU ARE NOT EMPLOYED, COMPLETE PART 4.

PART 4.

Y. Please check one.

73 [ ] 1. I am seeking a job
[ ] 2. I am not seeking a job

Z. If you are seeking a job, please check the **major** reason you have been unable to secure employment. (check one)

74 [ ] 1. Salary too low in the field for which I was prepared at the community college
[ ] 2. There are few openings in the field for which I was prepared
[ ] 3. I need more education to qualify for the job I want
[ ] 4. I have changed my career objective since graduating
[ ] 5. I have not looked hard enough

What changes could be made to your community college program to improve a graduate's employment and/or transfer performance?

_____

_____

_____

Thank you for completing this questionnaire. Please return it in the enclosed prepaid envelope.

APPENDIX B

1982 GRADUATE FOLLOW-UP STUDY
NON RESPONDENT PHONE INTERVIEW

CAREER _____
TRANSFER _____

NAME _____ PHONE _____

1. What was your primary reason for attending Harford? (one choice)

1. Explore a new career or academic area
2. Prepare for immediate entry into a career
3. Prepare for transfer to a four-year college
4. Update skills for currently held job
5. Self-enrichment
6. Other _____

2. Have you achieved this goal?

1. Yes 2. No

3. Were you satisfied with your program at HCC?

1. Yes 2. No

4. Are you presently employed?

1. Full-Time 2. Part-Time
(either answer go to Ques. Q, S, T) then Ques. 5

3. Not employed (go to Ques. Y & Z) then Ques. 6

5. Is your job related to your program?

1. Yes 2. No (go to Ques. V)
(go to Ques. 6)

Q. What is the title of your position?

_____

Employer's Name (or Company)

_____

_____

V. If your job is not related to your program of study check reason.

1. Could not find job in field
2. Better pay in field which employed
3. Better opportunity for advancement in field which employed
4. Did not want to work in field of preparation
5. Program of study was not career-oriented
6. Other (please explain) _____

_____

S. When did you begin your present job?

1. Before attending Harford
2. While attending Harford
3. After graduating from Harford

Y. If not employed

1. Are you seeking a job, or
2. not seeking a job

T. Where employed?

1. Harford County
2. Baltimore County
3. Baltimore City
4. Other Maryland County
5. Washington, D.C.
6. Delaware
7. Pennsylvania
8. Other State

_____

Z. IF YOU ARE SEEKING A JOB what is the major reason you have been unable to secure a position?

1. Salary too low in field
2. Few openings in field
3. More education to qualify for job
4. Changed career objective
5. I have not looked
6. Other (explain) _____

_____

6. Have you attended another college as a transfer student since graduating from Harford?

1. Yes 2. No

Thanks for your help

MARYLAND COMMUNITY COLLEGES
EMPLOYER QUESTIONNAIRE

The purpose of this questionnaire is to help your community college and the State Board for Community Colleges assess and improve their programs. Please return it in the envelope provided. Thank you for your assistance.

Name of Graduate

Graduate's Job Title

A. For the job held by the community college graduate you supervise, is a two-year associate degree required? (check one)

14
- ☐ 1. Yes, at least an associate degree is required
- ☐ 2. No, but preference is given to holders of an associate degree
- ☐ 3. No, and no preference is given

B. Based on your own experience of supervising a community college graduate, please indicate how adequately you feel the college prepared him/her in each of the areas listed below. (check appropriate response)

	More Than Adequate 1	Adequate 2	Inadequate 3	Not Observed or Not Applicable 4
15 Performance of job skills from beginning of employment	☐	☐	☐	☐
16 Familiarity with any test or laboratory equipment required by this job from the beginning of employment	☐	☐	☐	☐
17 Ability to learn new techniques on the job	☐	☐	☐	☐
18 Ability to communicate with superiors	☐	☐	☐	☐
19 Ability to work well with other workers	☐	☐	☐	☐

(over)

ITEMS BELOW FOR COLLEGE USE ONLY

College Code (1 2 3 4) | Program Number (5 6 7 8 9 10) | 11: C A | 12: B I A H W F | 13: M F

C. Please rate the vocational training received by the individual in the following areas: (check appropriate response)

		Very Good 5	Good 4	Neutral 3	Poor 2	Very Poor 1
20	Technical knowledge	☐	☐	☐	☐	☐
21	Work attitude	☐	☐	☐	☐	☐
22	Work quality	☐	☐	☐	☐	☐
23	What is your overall rating of the vocational training received by this individual as it relates to the requirements of his/her job?	☐	☐	☐	☐	☐

D. As a result of this person's vocational training, how would you rate his/her preparation in relation to other employees in his/her work group who did not receive such training? (check one)

24
- ☐ 0. No basis for comparison
- ☐ 1. Individual is better prepared
- ☐ 2. Both are about the same
- ☐ 3. Individual is less prepared

E. In general, would you employ another graduate from this community college who has a degree or certificate in the same area as your current employee?

25
- ☐ 1. Yes
- ☐ 2. No Why? _____

F. Please specify any additional skills or areas of knowledge that you feel an Associate in Arts or Certificate graduate you employ should have.

_____

_____

_____

G. Please feel free to add any additional comments.

_____

_____

_____

H. If further evaluation of college programs is needed, would you be willing to share your expertise and be contacted by our faculty?

26
- ☐ Yes ☐ No

Supervisor completing this questionnaire:

Name: _____

Title: _____

Company/Organization: _____

City/State/Zip Code: _____

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